> ***Engineer notes on the Geran 3***
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> *The cruise speed finding is operationally critical and underreported. The Geran-3 was initially assessed as a near-impossible intercept target at 500–600 km/h. Ukrainian combat experience showed the actual cruise speed is 300–350 km/h — within range of the Sting and other electric interceptors. The drone only goes fast when it senses Ukrainian air defenses nearby. That behavioral pattern is itself an intelligence indicator: when the Geran-3 accelerates, it has detected something. Ukraine's interception of the first Geran-3 by a Wild Hornets Sting on November 30, 2025, confirmed that at cruise speeds the platform is not invulnerable to low-cost interceptors.*

> *The PBS TJ150 (propulsion) finding is another three-source supply chain failure — a Czech commercial turbojet engine enabling a Russian-Iranian kamikaze drone at scale, acquired through sanction evasion channels. This is the same component sourcing pattern documented in the Lancet-3 teardown. The global commercial aviation supply chain keeps feeding both sides of this conflict regardless of export controls. That structural reality is one of the book's core analytical findings.*
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> *I spent years working on cruise missiles that cost $1–$2 million per unit and were designed to do exactly what the Geran-3 anti-radiation variant does at a fraction of the cost. The convergence thesis is not a prediction — it is a description of what already happened. The Geran-3 is the convergence thesis in hardware. When the Wild Hornets Sting — a $2,500 interceptor built by 25 engineers with 3D printers — killed a Geran-3 on November 30, 2025, you had a $2,500 drone defeating a platform that would have been classified as a cruise missile by any defense establishment twenty years ago. That engagement belongs in the first chapter of every future defense acquisition document.*